

VENTURE CAPITAL INVESTMENT CONTRACTS: A PRIMER AND TAXONOMY

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Contracting in venture capital is a process by which both the entrepreneur and the VCs learn about each other's intents and formulate their agreements in writing. Contracts are by nature incomplete as it is impossible to foresee all contingencies to be faced. Nevertheless, contracting is an essential part of the venture capital investment process, and a powerful complement and support of the valuation process.

This technical note provides an overview of the main contractual features of venture capital contracts, focusing on their *raison d'être* and their theoretical grounding and rationale. A taxonomy is presented to link the contractual clauses to the respective types of actual or potential conflicts they address, as well as present a number of observations relevant to venture capital contracting in general.

As much as possible, we elaborate on the actual effectiveness of the most common contractual clauses, i.e. whether in practice they actually provide the level of comfort or benefits they are purported to and how they fare in typical funding negotiations. We also provide some insights on the relative strength of venture capital contracts in Europe vs. the US.

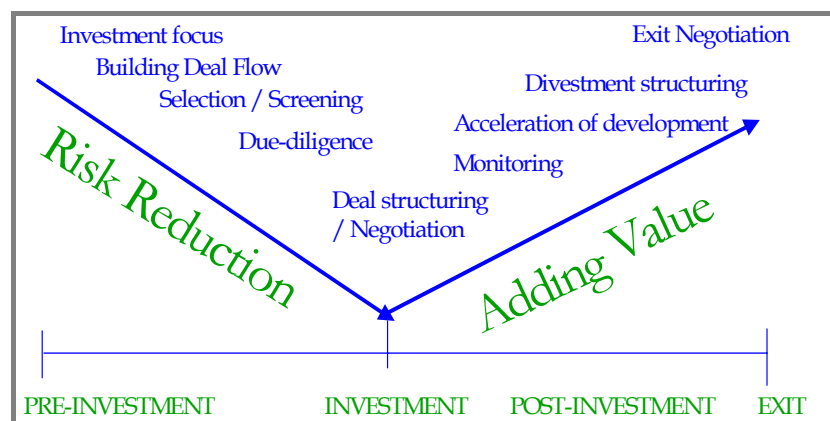
I. INTRODUCTION

In the world of finance, early stage financings (venture capital, angel financing, etc.) have always earned a very distinctive, and deserved, reputation as some of the more obscure if not esoteric dimensions of the field. The startup firms these financial investors cater to are known as much for the excitement and drive of their wizard-driven teams, the revolutionary technologies they hatch and the dedication they generate as for their bad habit of failing in droves, burning cash as if there were no tomorrow and ultimately not delivering the promised bounties, or only after excruciating delays and sufferings. So, how does one go about analyzing and providing financing to such “outliers” in terms of financial risk? The argument developed in this note is that to a large extent, the inherent valuation uncertainties are addressed through sophisticated contracting schemes which, in effect, (1) provide for “contingent repricing” through time as the venture develops, reallocating cash flow and control rights when need be; and (2) provide effective screening and incentivizing mechanisms, helping “smoke out” entrepreneurs with lesser quality projects.

Financial resources are particularly difficult to come by for young growth companies because of the information asymmetries they face, often precluding them from raising capital from conventional sources (banks, etc.) and making raising capital very costly (Brito and Mello, 1995; Petersen and Rajan, 1994; Manigart, 2000d). When family, friends and angel investors become insufficient to fund the company development, start-ups turn to venture capitalists (VCs), professional risk investors who invest mainly third party funds with an objective to maximizing financial returns.

According to Tyebjee and Bruno (1984), the VC’s investment process can be divided into five stages: (i) deal origination, (ii) screening, (iii) evaluation, (iv) deal structuring and (v) post-investment activities. This is described in more detail in Exhibit 1 below, which also highlights the very critical juncture at which contracting stands. While much is known about how investors select investments and the nature of the post-investment relationship (Sapienza and Timmons, 1989; Fiet, 1996; Fredriksen, 1997), little is known about how the investment contracts are negotiated (Steiner and Greenwood, 1995). The purpose of this paper is to shed some light on aspects of the contracting process.

Exhibit 1
The VC Investment Process



The contracting process is best described as a learning process whereby the various parties to the contract start divulging their true intent (generally known as “signaling”). Through contracts, VCs and entrepreneurs try to regulate a number of events and behaviors that have been extensively described in literature. Before drafting a contract and including project specific contractual clauses, it is important to know the underlying potential conflicts that can arise during the life of the investment.

VCs translate their investment objectives in the contracts (Hudec, 2000b): these include (i) to maximize their potential financial returns; (ii) to provide downside protection against loss (risk mitigation); (iii) to allow them to manage and control the investment if the company starts to diverge significantly from the business plan (contingency planning); and (iv) provide exit rights through an IPO or other value maximizing transaction. To this end, VCs and entrepreneurs have found that a crucial element of contracts was the alignment of each party’s objectives (goal congruence).

Contracts are the evidence of what was agreed upon at the beginning of a venture. Most VCs go back to contracts only to check on their rights. Contracts are mainly there to rule instances when events do not go well. This technical note focuses narrowly on venture capital contracting issues and the tools used to mitigate risks inherent to any venture: it does not attempt to cover other areas, such as the evaluation of potential investments and monitoring tools, which critically contribute to the success of new venture investments. A general taxonomy of venture capital contractual clauses is presented with the conflicts each is trying to address. Finally, as much as possible, a practical evaluation of the effectiveness of these clauses is presented.

The objective of this document is to facilitate a comprehensive understanding of VC contracting, in all its legal complexity and yet operational simplicity. Without an intuitive understanding of the goals to be achieved with such instruments, venture capitalists are unlikely to reap the full benefits of their investing efforts.

II. CONFLICTS ADDRESSED IN VENTURE CAPITAL CONTRACTS

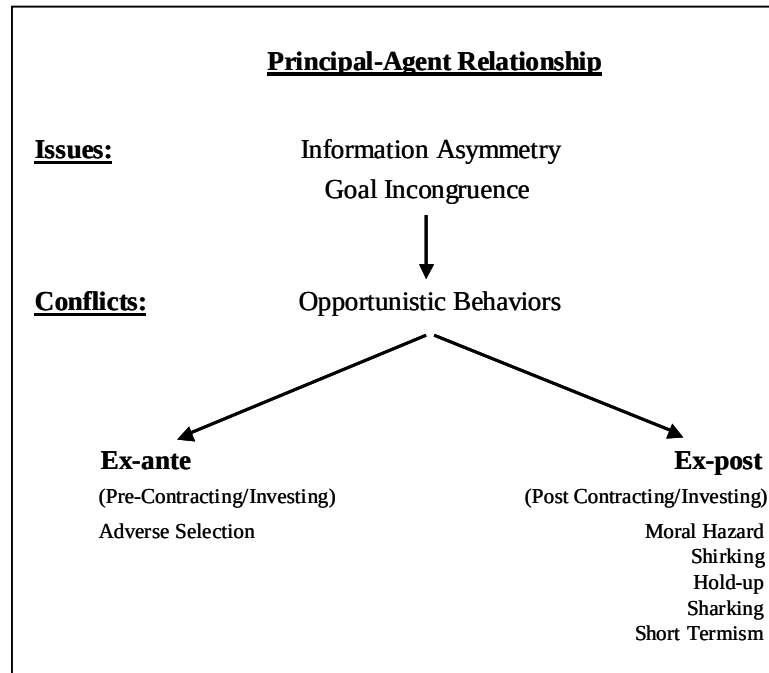
II.1 Introduction

VC investments are more risky than investments in quoted companies in general (Schilit, 1993): informational difficulties, illiquidity, large investment sizes, long investment horizons, and high company-specific risks combine to explain the higher overall returns required *a priori* by VCs (Manigart, 2000) and the existence of a less-than-perfect capital market with numerous potential conflicts (Wright and Robbie, 1998).

In this section, we quickly review the types of conflicts present in VC / entrepreneur relationships, which are best described as typical principal-agent relationships under asymmetric information and goal incongruence. This situation can lead to opportunistic behaviors known in contract theory as Adverse Selection, Moral Hazard (including Shirking), Hold-up, Sharking and Short-Termism.

As prerequisites for any investment, VCs and entrepreneurs will try to reduce the information asymmetries and goal incongruence in order to mitigate the risks of opportunistic behavior both pre-contracting (ex-ante) and post contracting (ex-post).

Exhibit 2
Opportunistic Behaviors under Asymmetric
Information and Goal Incongruence



II.2. Agency Relationship Theory

An agency relationship is born of a contract under which one or more persons (the principals) engage another person (the agent) to perform some service on their behalf, which involves delegating some decision-making authority to the agent (Jensen and Meckling, 1976). For Orts (1998), an agency relationship is a fiduciary relationship that results from the manifestation of consent that one person shall act on behalf of the other to act this way. In the venture capitalist-entrepreneur relationship, the venture capitalist is usually considered as the principal who delegates decision-making authority to the entrepreneur (agent), even if, as developed below, it is sometimes difficult to determine who acts as agent and who acts as principal (Admati and Pfleiderer, 1994; Barry, 1994).

Most academic writings on the relationship between venture capitalists and entrepreneurs rely on a principal-agent model under which the venture capitalists are principals and the entrepreneurs are agents able to take actions that harm the investors (Smith, 1998). Under this view, the primary purpose of any contract between the two parties is “to align entrepreneurs’ incentives with venture capitalists’ goals” (Gompers, 1999). Obtaining goal congruence then is often the essence of contracting.

Alternative perspectives are obtained when assuming that the entrepreneurs are in fact the principals and venture capitalists are agents of the entrepreneurs (Utset, 1997; Cable and Shane, 1997; Gifford, 1997; Sapienza, 1992) or of their fund

providers (Robbie, Wright and Chiplin, 1997). Although suggested in prior work (Sapienza, 1992), Gifford (1997) actually developed the first formal model examining VCs as agents of entrepreneurs; the model notes the dilemma facing the VCs in allocating their attention between improving current ventures and evaluating possibilities for new investments. The model acknowledges potential incentives for VCs to take actions that negatively affect the performance of the venture and entrepreneurs' and investors' wealth (Manigart and Sapienza, 2000). VCs also act as agents when they are active in structuring new financing rounds for their investee companies and motivating new potential investors.

Due to the fact that the agents act on behalf of the principal, two risk factors arise: (i) goal incongruence, (i.e. the agent pursues a different goal than the principal), and (ii) information asymmetry, (i.e. it is impossible for one party to know what the other party is doing or intends to do). Goal conflicts as well as information asymmetries are significantly present in the venture capitalist-entrepreneur relationship (Amit, Glosten and Muller, 1990; Chan, Siegel and Thakor, 1990; Barry, 1994). Manigart (2000) confirms Fiet's (1995) speculation that conditions leading to greater agency risk increase involvement of the VCs.

As the VC market is inherently imperfect, agency risks and business risks are likely to become important (Sapienza and Gupta, 1994). Agency risk refers to the risk that the ability of the entrepreneur is lower than expected (incompetence problem), or that the entrepreneur may take actions in his/her personal interest (opportunistic behavior), but which destroy value for the VC (Admati and Pfleiderer, 1994; Amit, Glosten and Muller, 1990; Sapienza and Gupta, 1994).

II.3. Asymmetric Information Theory

Information asymmetries arise whenever one party to a transaction possesses superior information compared to the other party. Inside information can be the source of opportunistic behavior, as contractors have the opportunity to influence their reward schemes to positively influence the rewards derived from privileged information.

Asymmetric information in venture capital projects is most evident during the selection of the projects (the entrepreneur usually knows more than the investor about the true prospects of the project) and the due diligence phase (the market knows more than the investor and the VC knows more about his/her ability to add value to the venture than the entrepreneur does). Practically, the VCs are mainly concerned with the entrepreneur's quality and the potential of the venture, while the entrepreneurs are concerned with the value add the VCs promise to deliver along with their cash investment. Once the investment is made, information asymmetries may arise when the entrepreneur refrains from giving the complete information on an investment to his investors. The VC is obliged to monitor his investments and obtain regular confirmations that the business is going according to plan.

II.4. Goal Incongruence

Goal incongruence describes the sometimes-conflicting objectives present within the VCs-entrepreneur relationship (Amit, Glosten and Muller, 1990; Chan, Siegel and Thakor, 1990; Barry, 1994). Ex-ante, the entrepreneurs are keen on maximizing the pre-money valuation of their project and receiving adequate

funding and VC support while the VCs are concerned with minimizing the pre-money valuation, reducing the intrinsic risk of the venture investment. Ex-post, the entrepreneur is interested in leveraging his/her network of investors to solve operational issues (i.e. strengthening the management team, finding new clients, assisting in the globalization of the firm).

II.5. Opportunistic Behaviors

According to Williamson (1985), opportunism is “self-interest seeking with guile.” Opportunistic behaviors can occur *ex-ante* (prior to making the investment) and *ex-post* (after investing). The six main opportunistic behaviors described in the literature include: (i) adverse selection, (ii) moral hazard, (iii) hold-up, (iv) shirking, (v) sharking, and (vi) window-dressing. Adverse selection occurs *ex-ante* while the other five conflicts occur mainly *ex-post*.

(i) Adverse Selection Problem

Milgrom and Robert (1992) define adverse selection as “the kind of pre-contractual opportunism that arises when one party to a bargain has private information about something that affects the other’s net benefit from the contract and when only those whose private information implies that the contract will be especially disadvantageous for the other party agree to a contract.” Sahlman (1990) and Amit, Glosten and Muller (1990) both expressed concerns about adverse selection in the venture capital market.

From the entrepreneur’s perspective, the adverse selection problem centers on the VC’s competence at providing non-financial contributions to the firm. From the VC’s perspective, the adverse selection problem lies in the difficulty of selecting projects with entrepreneurs able and willing to deliver their business plan’s promised returns.

Two important elements used to mitigate the adverse selection process are (i) signaling and (ii) reputation. Both try to address the information asymmetries within a project at the pre-contracting stage and improve the quality of the information available to the contractors. A number of contractual clauses address the issue of adverse selection at the post-contracting stage. These clauses seek to protect the VCs from entrepreneurs’ possible opportunistic behaviors after the investment has occurred. Contingency clauses, vesting provisions, as well as the right to dismiss the management team members all address the adverse selection problem *ex-post*.

(ii) Moral Hazard Problem

Holmström (1979) described the moral hazard problem as “an asymmetry of information among individuals that results because individual actions cannot be observed and hence contracted upon.” Moral hazard occurs when one party attempts to gain advantage *within* the present terms of the contractual arrangements, often due to lack of specification or enforceability of the contract (Masten, 1996). According to Chan, Siegel and Thakor (1990), moral hazard in the venture capitalist-entrepreneur relationship can occur when the entrepreneur has control over his own ability but performs below this ability by, for example, not exerting enough effort (shirking).

Barney, Busenitz, Fiet and Moesel (1994a) identify the moral hazard problem in venture capitalist-entrepreneur relationships as a problem of opportunism. They assume that the contract between the two parties can best be seen as a governance device used to manage conflicts of interest between them and that the need to write and enforce contractual covenants is partly a function of the probability of opportunistic behavior occurring. Two kinds of opportunistic behaviors may arise: managerial opportunism (e.g. managers engage in actions that reduce the wealth of venture capitalists by spending too much money on research and development, taking out too high a salary, etc.) and competitive opportunism (e.g. managers reduce the wealth of venture capitalists by leaving the firm and starting a new competing firm or acting as advisors to competing firms).

(iii) Hold-Up (Ex-Post Expropriation)

Goldberg (1976) coined the “Hold-Up Theory” to describe the contractual worries of someone being forced to make follow-on investments, accept disadvantageous terms ex-post, or seeing his investment being devalued by the actions of others. The party that is forced to accept a worsening of the effective terms of the relationship has been held-up.

Various strategies, such as staging, are available to mitigate the hold-up problem. For Neher (1999), an important element of the hold-up problem that motivates the use of staged financing is the initial intangibility of the physical capital that is invested in the venture. In contracting, Williamson (1975,1985), Klein, Crawford and Alchian (1978), Grossman and Helpman (1986), Hart and Moore (1990), North and Weingast (1989), and Shleifer and Vishny (1997) all show that typical contracts and governance structures are seen as mitigating the hold-up problem when the investor is empowered.

(iv) Shirking (Not Exerting Enough Effort)

As stated by Holmström (1982), shirking is “the problem of inducing agents to supply proper amounts of productive inputs when their actions cannot be observed and contracted for directly.” For Orts (1998), agents will shirk their responsibilities, if given half a chance. If not sufficiently monitored, they will not work as hard as they should, take too many breaks, or behave otherwise selfishly, lazily or irresponsibly.

Alchian and Demsetz (1972) argued that shirking within a firm could be reduced to an efficient level by a principal (VC) who specializes in monitoring. Assigning the VCs title to the residual earnings¹ of the venture would encourage the VCs to engage in the “right” amount of monitoring, defined as the amount at which the marginal costs of monitoring equal the marginal benefits of shirking reduction. Any solution to the shirking problem in venture capital contracting, therefore, must allow for reallocation of rewards after the initial investment (Smith, 1999).

Venture capitalists also promise to perform value-added services but fail to perform up to the entrepreneur’s expectations or later attempt to renegotiate this

¹ Alchian et al. (1972) define residual earnings as all earnings remaining after the entrepreneurs are paid for their inputs.

promise when the entrepreneur has reduced bargaining power. This is a problem of “incompetence” and it may be significant in the venture capital community, but for Smith (1998), this “free rider” problem does not appear to be material.

(v) Sharking (Conflicting Private and Corporate Interests)

Sharking refers to situations in which (1) agents divert assets that are “owned” by others in the firm; (2) principals take undue advantage of power held over agents. Orts (1998) describes four types of sharking: First, sharking against a minority shareholder involves the unfair alliance of majority shareholders, corporate management, and the board to “freeze out” or “squeeze out” minority shareholders. Second, excessive executive compensation involves the problem of overreaching by entrepreneurs to inflate their compensation package by exerting undue influence on the board. Third, the enterprise may restructure the company to the detriment of creditors and employees. Fourth, financial reengineering of an enterprise by outside investors and new capital providers may result in a form of sharking against other participants in the firm, including shareholders, employees and former creditors.

In venture capital the interests of the VCs and the entrepreneurs can diverge on many topics, especially and most importantly, on the exit routes. Entrepreneurs are seldom inclined to consider the financial exit alternative when it could result in having to relinquish control.

(vi) Short-Termism (Window Dressing)

At every stage of a company’s financing, new information about the venture is released (Sahlman, 1990; Kaplan and Strömberg, 2000). Sahlman (1988) describes how the entrepreneur may try to improve short-term performance reporting in order to make sure that the project gets refinanced at improved conditions.

To mitigate short-termism, contracts often rely on convertible debt instruments, which make manipulation less profitable because the venture capitalist will convert debt into equity if the firm looks “too good” which would reduce the entrepreneur’s profit (Schmidt, 1999). Furthermore, the entrepreneurs can be made to commit to the projected financial figures and milestones presented in the business plan by staging the investment around performance and development milestones.

II.6. Conclusion

Principal-agency theory tackles three interconnected contracting issues: the existence of asymmetric information and goal incongruence between the contracting parties, which then leads to the potential for opportunistic behaviors. This section showed that the opportunistic behaviors could be mitigated by using appropriate contractual tools. Once these potential opportunistic behaviors are capped and goals are better aligned, VCs and entrepreneurs can engage meaningfully into long-term contractual relationships establishing the basis for their future collaboration during the venture. The next section addresses in greater details five mitigation strategies commonly used against the conflicts described above.

III. CONFLICT MITIGATION STRATEGIES

III.1. Introduction

VC investments are typically concluded with a set of contracts that include a stock purchase agreement, a certificate of designations (or restated certificate of incorporation), a shareholders' agreement, and a registration rights agreement collectively referred to as "venture capital contracts" (Halloran, 1998). However many believe that these agreements, while very standard (Dent 1992), tend to be very one-sided in favor of the VCs (Sallman 1990). Smith (1998) even wrote that the explicit terms of most venture capital contracts do not adequately protect entrepreneurs.

Exhibit 3 below summarizes five key mitigating strategies used in venture capital contracting. First, the improvement of the information quality at the pre-contracting stage through signaling and careful due diligence reduces adverse selection. Second, deal syndication reduces the cost of information gathering and post-contract monitoring. Third, stage financing reduces the risks inherent in ventures and makes financing cheaper. Fourth, the deal structure, especially the securities used and contractual clauses, can realign interests. Finally, monitoring can be used *ex-post* to reduce agency risks.

Exhibit 3
Key Mitigating Strategies in Venture Capital Contracting

<u>Mitigation Strategies</u>	
<u>Pre-Contracting:</u>	Information Quality Improvement
<u>Contracting:</u>	Deal Syndication Stage Financing Deal Structuring
<u>Post Contracting:</u>	Monitoring

III.2. Information Quality Improvement

At the pre-contracting stage, the costs of adverse selection can be mitigated through the improvement of the quality of the information available. Prior to investing, during the due diligence process, a wealth of information is usually gathered by both the investor and the entrepreneur. This information gathering serves to provide comfort to both parties that their objectives are aligned (congruent) and that they stand to profit from their cooperation. The two most important elements of the due diligence phase are (i) the reference checks on reputation and (ii) the signaling that occurs with respect to the discussions on potential terms to be included in the contracts and the type of security to be used.

(i) Reputation

Most venture capitalists rely heavily on the entrepreneur's reputation (brand name) to gain comfort on his/her ability to perform and deliver the expected rewards detailed in the venture's business plan. A reputational check is also done by the entrepreneur, who is concerned with being financed by investors who bring not only money but also expertise, network and some form of value-added (Smith, 1998).

Black and Gilson (1998) show that talented managers are more likely to invest their human capital in a company financed by a respected venture capitalist, because the venture capitalist's participation provides a credible signal about the company's likelihood of success. Further, empirical studies suggest that firms backed by well-respected venture capitalists are able to sell shares in an IPO at higher prices than other firms (Barry, Muscarella, Peavy and Vetsuypens, 1990; Megginson and Weiss, 1991). Gompers (1996) argues convincingly that young venture capital firms have incentives to grandstand, i.e. they take actions that signal their ability to potential investors. Specifically, they would tend to bring companies public earlier than older VCs in an effort to establish a reputation and successfully raise capital for new funds.

(ii) Signaling

Lazear (1986) shows that in a traditional principal-agent framework, contracts can also be used as screening devices if the ability of the entrepreneur is unknown by the VC. By setting the entrepreneur's compensation as an increasing function of performance, the venture capitalist discourages less able entrepreneurs from accepting the contract. For signaling to happen, the VCs create "contractual scenarios" such as alternative forms of financing, which are costly for the entrepreneur to lie about. The type of contract the entrepreneur chooses will then signal to the VCs the relevant information about quality (i.e. contingency dependent clauses). Leland and Pyle (1977), for example, show that an entrepreneur's willingness to invest in his/her own project can serve as a strong signal of project quality. Later stage ventures can also signal future prospects with their use of debt or commitments to dividends, since those are costly commitments of cash flows that cannot be replicated by low prospect firms (Ravid and Sarig, 1991).

III.3. Deal Syndication

Venture capitalists, upon finding a promising venture, will often send the proposal to other investors for their evaluation. Syndicating deals provides: (1) a better comparison of opinions with other knowledgeable sources. As indicated by George Middlemas of Inco Securities in Perez (1986), "if two or three other reputable VCs, whose thinking you respect, agree to go along, that is a double check to your own thinking," (2) a larger pool of capital for current and follow-on cash needs; (3) a mitigation of the risk, and (4) more expertise and support for the ventures.

Experienced venture capitalists primarily syndicate first-round investments to venture investors with similar levels of experience. In later rounds they can invite less experienced VCs. Usually, the ownership stake of the lead venture capitalists frequently stays constant in later venture rounds to mitigate the risk of

opportunistic behavior by the lead VCs. Lakonishok, Shleifer, Thaler, and Vishny's (1991) discussion of money manager "window dressing" also suggests a possible rationale for venture syndication. Syndication may be a mechanism through which venture capitalists exploit informational asymmetries and collude to overstate their performance to potential investors (especially in very negative markets) by organizing a new round of financing with new investors at favorable terms.

III.4. Stage Financing

Stage financing refers to a method by which a company is funded in "stages", i.e. is provided incrementally with money as it passes milestones. For Sahlman (1990), staging is one of the most important mechanisms for controlling the venture, as part of the generic, two-pronged approach used: (1) designing investment contracts which materially skew the distribution of payoffs in favor of the venture investors, and (2) an active involvement in the development process of the invested company (Cossin, Leleux and Saliasi, 2000).

While the commitment might be to fund the entire amount, the later stages of funding are contingent on the company attaining set goals (milestones). The option to abandon is essential for VCs because an entrepreneur will almost never stop investing in a failing project as long as others are providing capital (Admati and Pfleiderer, 1994). Stage financing can also refer to the fact that most growing companies need funding at various points in their development. At each point, the company solicits investors to fund the next phase of company growth. As is described in Cossin, Leleux and Saliasi (2000), staging of the investment is a mutually beneficial arrangement. It gives the venture capitalist the option to reinvest or abandon the project. It also provides the investee with gradually cheaper funding, as the sources of uncertainty are progressively removed.

Typically, the early rounds of investments create collateral that supports the valuations in the later rounds. Neher (1999) characterized the optimal staged investment path and showed how various features of the venture affect it. Each stage of financing can reduce management's percentage ownership in the company. As the company progresses, however, its stock should command a higher price in each successive stage. The reason for this is that the investor's risk decreases as the company succeeds and meets its goals.

Staging the commitment of capital also helps reduce the uncertainty typically surrounding small ventures. As time passes, the venture capitalist is able to gather more information about the team, the market and the product, thus reducing major risks and uncertainties considerably (Sahlman, 1988). At every stage, new information about the venture is released (Sahlman, 1990; Kaplan and Strömberg, 2000). Moreover, by staging the commitment of capital the venture capitalist gains the option to abandon and to revalue the project as new information arrives. As Sahlman shows, this option in fact raises the value of the investment. This is the corner stone of the theory of investment under uncertainty, in which the irreversibility of investment creates value for the option of waiting for better information (Dixit and Pindyck, 1994). Gompers (1995) provides empirical evidence on the importance of staging venture capital in gathering information on financed projects, where he found that high-tech companies, with less tangible assets and higher risks, are subject to more frequent monitoring by venture capitalists (Al-Suwailem, 1994).

Gompers (1995) argues that staged capital investments minimize agency costs. There is also an efficiency cost to financing the venture via multiple rounds of investment vs. a single round. Though efficient, financing the venture up front may be infeasible because the entrepreneur cannot commit to not renegotiating down the outside investor's claim once he has made his investment. Staging the investment over time also helps to mitigate this commitment problem.

III.5. Contracting

VCs structure their investments using a mix of various types of contractual securities and contractual clauses to mitigate their risks and maximize their potential return. Each type of security offers a different mix of property and control rights. Property rights define the possible claims on shares of the company and consequently on the ultimate cash benefits of the venture, while control rights influence more the behavior of the entrepreneurs or the venture and the available recourse against possible improper deeds.

Exhibit 4 summarizes the different characteristics of debt and equity and their coverage of both control rights that regulate the monitoring and effective controlling of the venture and property rights which regulate the exiting or refinancing of the venture. Control rights are mostly effective in settling behavior-induced conflicts while property rights appear more effective at settling outcome-induced conflicts. This theme will be further evidenced in the next section's taxonomy of contractual clauses.

Exhibit 4
Key Characteristics of Debt and Equity Financing Instruments

<u>Characteristics of the Two Financing Instruments</u>		
Associated Characteristics Financing Instruments	Debt	Equity
Property Rights (i.e. benefits)	Strong (fixed returns)	Weak (residual claimants)
Control Rights (i.e. available recourse)	Weak (only on default)	Strong (continuous monitoring)
Use of Price Controls	High	Low
Use of Behavior Controls	Low	High

Source: Kocchar (1997)

Contractual clauses are included in contracts to assist parties to a contract in formalizing their initial agreement on issues that may occur during the life of the contract. New contractual clauses are continually designed to settle ex-ante new issues that have arisen in venture relationships.

A) Contractual Securities

Venture capital deal structures vary from investment to investment but most venture capital deals are structured using the same concepts. In particular, the securities used revolve around two main varieties: equity and debt. Each sub-type of debt or equity carries certain characteristics more suitable for certain types of investments; the main issue in contracting is then to select the liability class structure with the most appropriate amount of control and property rights to stimulate the entrepreneur to achieve the objective set in the business plan.

A.1. Equity

Equity is the initial simplest security form of a company. Equity is created at the onset of a company's establishment and represents an ownership interest in a company.

(i) Common Equity

In most cases, common stock carries the right to vote for directors and to vote on other matters affecting the company. It also entitles holders to receive notice of shareholder meetings and to attend them, as well as the right to review corporate records or receive financial reports. Common stock can pay cash dividends based on company earnings but only after preferred stockholders receive their dividends. Dividends are usually paid at the discretion of the company's board of directors but are the exception, not the rule, with most growing, privately held companies. Holders of common stock participate last in company liquidations. Company creditors, debenture holders, and preferred stockholders get paid in that order, before holders of common stock.

Common stock can be issued in one or more classes. One frequently used company structure authorizes the issuance of two classes of common stock that differ only in the number of directors each class is entitled to elect. This arrangement can be used to insure an investor a seat on a company's board of directors while, at the same time, insuring that control of the board will remain with management.

(ii) Preferred Stock

Preferred stock provides the investors some "preference" rights not accorded the common stock holders. From management's perspective, preferred stock can be sold at a substantial premium over the price of common stock. This can allow the company for example to continue selling its common stock at a lower price to management and other key employees without triggering potential tax liability for receipt of undervalued stock (Reinke, 2000).

(iii) Convertible Preferred Stock

A typical convertible preferred stock entitles the investor to convert the shares into common stock at a predetermined formula and to vote the preferred stock on issues presented for shareholder vote. The voting rights conferred the convertible preferred stock often include the right to elect one or more directors to the company's board of directors and to approve certain major decisions. Common

“major decisions” include the issuance of additional shares of stock to others, the sale or merger of the business, the creation of new stock with preferential rights and the change of the company’s core business activity.

Venture capital investors use convertible preferred stock frequently. The stock’s preferred status gives the investor a preference in the event of a company liquidation or sale. In growing companies, this preference usually entitles the investor to receive back its investment, and an agreed upon return, before other investors receive any proceeds from a liquidation or qualifying sale. This right is very important because many start-ups expect to be acquired. Upon a sale or liquidation, convertible preferred stock typically receives a return of its per share purchase price before the common stock receives any payment. Beyond this point, however, liquidation preferences vary greatly. At one extreme, the convertible preferred stock may be fully participating (see below): after receiving the amount of its purchase price per share (sometimes even with interest), the convertible receives payment on an equal per share basis with the common stock. This greatly dilutes the payout to the company’s founders holding common stock, to the benefit of the VC. At the other extreme, the convertible preferred stock may only have the alternative of receiving payment as if it were converted into common stock instead of recovering its initial purchase price per share. This results in treating the VC similarly to the founders of the company, except with downside protection.

Convertible preferred stock is usually accorded protection against dilution from stock splits, stock dividends and the future sale of the company’s stock at a price less than that which the preferred stock was sold. Clauses that are often embodied in the convertible preferred stock issue are further detailed below. The inclusions of certain clauses, such as liquidation preferences, in the share purchase agreements and shareholders agreement are largely decided within the negotiation process between the VCs and the entrepreneurs.

(iv) Participating Convertible Preferred Stock

Participating preferred stock is a variant of convertible preferred stock. In a liquidation, participating preferred stock allows the holder to receive the amount they initially invested before the common shareholders and then receive a pro rata share of what’s left after the liquidation preference is paid. Under most circumstances, the PCPS behaves more like a straight preferred stock or common stock rather than a position of convertible preferred (Kaplan and Strömberg, 2000). However, upon liquidation or exit, investors receive both the principal amount of the preferred, as they would in an investment of straight preferred, and they receive common stock. As a result, participating convertible preferred stock is better categorized as a position of straight preferred stock and common stock than as a position of convertible preferred.² In some instances, the participating preferred does not receive a return of principal if the company’s return is sufficiently high.

² Gompers (1998) describes participation provisions and refers to them as super priority provisions.

(v) Redeemable Nonconvertible Preferred Stock

Redeemable Nonconvertible Preferred Stock is similar to the convertible preferred stock except that the investor cannot convert. Redemption by the company of the preferred stock leaves only the investor's common stock outstanding. This permits investors after having given the company a reasonable opportunity to otherwise create an exit, to liquidate their investment by redeeming 95% of their cost, with a return on common capital (i.e. dividend), while retaining their equity position in the company through ownership of the common stock (Rubinstein and Morgenstern, 1995).

A.2. Debt

Debt, the second main type of financing instrument, is most often used in later stage financing. For Trester (1993), debt should become more pronounced in situations where monitoring is easier and the probability of information asymmetries is lower. Indeed, debt contracts typically include weak control mechanisms but are strong property claims. As the control rights are low, debt contracts have few behavior controls over the actions of the entrepreneur.

(i) Straight Debt / Loan / Bond / Note

The simplest form of debt is the loan. Loans can be made by an investor or in some cases a supplier. Debt enjoys seniority in the event of liquidation of the company: debt must be repaid prior to returning the nominal capital to the shareholders.

(ii) Convertible Debt

Venture capital financing is typically characterized by extensive use of convertible debt and stage financing. Cornelli and Felli (1998) show why convertible debt is better than a simple mixture of debt and equity in stage financing situations. When the venture capitalist retains the option to abandon the project, the entrepreneur has an incentive to engage in window dressing or short-termism (to bias positively the short-term performance of the project in order to reduce the probability that the project will be liquidated). With a straight debt-equity contract, the entrepreneur will always engage in signal manipulation. With a convertible debt contract, such behavior reduces the likelihood of liquidation, but increases the probability that the venture capitalist will convert debt into equity, reducing the entrepreneur's profits. Trester (1993) showed that for sufficiently high probabilities of asymmetric information, debt contracting might be neither feasible nor desirable. Under high asymmetric information, equity contracting may be a better alternative precisely because of the lack of "foreclosure" liquidation rights. Preferred or convertible preferred stock may then be the better alternative, because these types of security eliminate the foreclosure option while preserving some seniority in the event of bankruptcy. It is argued that this may be reason for the predominance of preferred stock in venture capital contracting.

(iii) Subordinated Convertible Debenture

Subordinated Convertible Debenture is a special form of convertible debt in which the principal and/or interest due under the debenture is convertible at the election of the holder into capital stock of the borrowing company at an agreed upon rate of conversion. These debentures usually do not entitle their holders to any rights to vote on matters that come before company shareholders. Often, however, they contain contractual provisions that entitle the holder to receive financial reports or limit the amount or type of debt to which it will be subordinate. Because they are debt instruments, convertible subordinated debentures have preference over common stock and preferred stock in the event of company liquidation.

As financial capital is an uncertain but critical resource for all firms, suppliers of finance are able to exert control over firms (Stearns, 1986, 1993). Debt and equity are the two major classes of liabilities, with debt holders and equity holders representing the two types of investors in the firm. Each of these is associated with different levels of risk, benefits, and control. While debt holders exert lower control, they earn a fixed rate of return and are protected by contractual obligations with respect to their investment. Equity holders are the residual claimants, bearing most of the risk, and, correspondingly, have greater control over decisions (Kochhar, 1997). Each type of security is different in its degree of possible control over the company and possible cash-flow allocation from the proceeds of the venture. VCs and entrepreneur negotiate the use of securities that best fit their objectives and their views on the future outcome of the venture.

Each contract encloses specificities such as seniority in liquidation, etc. and allows the contracting parties to include relevant clauses to possibly enforce in the process of controlling and benefiting from the venture's unwinding.

B) Contractual Clauses

As stated above, the use of specific contractual clauses form a cornerstone of any mitigation strategy in venture capital. The complexity of the trade comes fully to light when one begins to examine in detail the agreements made between the VCs and the entrepreneurs. Sometimes, the piling on of multiple layers of different types of securities with different contractual clauses also result in a complexity only fully encompassed at the unwinding of the investment within the context of a trade sale or liquidation. These aspects will only be lightly addressed in this note: Section IV covers clauses in more details with a convenient taxonomy to sort them by the stages of the venture in which they can be enforced and linking them to the conflicts they potentially mitigate.

III.6. Monitoring

After the investment is made, VCs reduce agency risk by closely monitoring the entrepreneurs' companies. For this reason, VCs usually demand board seats and powerful control rights.³ VCs have to be efficient in monitoring the ventures in order to overcome moral hazard problems after the investment is made (Admati and

³ Lerner (1994) cites Sahlman for proposing that "venture capitalists usually have several board seats and powerful control rights"

Pfleiderer, 1994; Barry, Muscarella, Peavy and Vetsuypens, 1990; Lerner, 1995) and may achieve this by gaining specialist knowledge of specific sectors or industries (Hall and Hofer, 1993; Sahlman, 1990; Manigart and Sapienza, 2000). Thanks to this monitoring, entrepreneurs are less able to get away with opportunistic actions that destroy company value. While Gorman and Sahlman (1989) and Sapienza (1992) both found monitoring to be heaviest in early stage ventures, MacMillan, Kulow and Khoylian (1989) and Elango, Fried, Hisrich and Polonchek (1995) found no relationship between the company's current stage and the involvement of its VCs. In any case, one purpose of monitoring would appear to be to lower agency risks. Therefore, according to finance theory, the presence of mechanisms to monitor should lower the perceived variability of future performance and lower the required return (Manigart, De Waele and Leuven, 2000b).

IV. A SIMPLE TAXONOMY OF MAJOR CONTRACT CLAUSES

IV.1. Introduction to the Taxonomy and Generic Propositions

Contract clauses are one of the key mitigation tools used in venture capital investments; in some instances, they can even turn not-so-successful investments into significant profits for the VCs. It is thus essential for investors to understand these clauses, the rationale for their inclusion, their potential for mitigation and their ultimate interactions with other clauses in various project circumstances. To facilitate the organization of the presentation of these clauses, we rely on the contractual dimensions identified by Landström (1990), namely the terms:

- (i) affecting the management of the entrepreneur's company
- (ii) focusing on the monitoring of the company
- (iii) effecting changes in ownership and management
- (iv) directed towards "exit".

Items (i) and (ii) are generally seen as control rights, while items in categories (iii) and (iv) related more closely to property rights. To structure the review of these contract clauses and their impact on entrepreneur-VC relationships, a taxonomy is presented, showing also the conflicts these clauses attempt to mitigate and the objectives they pursue. This taxonomy serves as the basis for a number of propositions:

Proposition 1: It is convenient to split contract clauses between those settling the monitoring and control aspects of a venture (control rights) and those focusing on settlement of the exit of a venture (cash-flow or property rights).

Proposition 2: Property right clauses are virtually all concerned with outcome-based issues, while control right clauses deal mostly with behavior-based issues.

Clauses are indeed induced either by certain behaviors (behavior-based) or by certain outcomes in the investment process (outcome-based). Further, Kaplan and Strömberg (2000) explain that clauses either affect the control capacity (control rights) of the investors and/or the income streams derived from the venture (cash-flow or property rights).

Proposition 3: Few property clauses actually attempt to mitigate conflicts linked to information asymmetries or agency conflicts, as these conflicts tend to appear earlier in the life of the investment.

Behavioral conflicts tend to happen earlier in the life of the venture and necessitate monitoring and control mechanisms from the VCs. Later in the life of the investment, either the management-entrepreneur has adapted its behavior to that of the VCs or has been replaced by a more market aware management team. Investors then only worry about maximizing the liquidity event and have relinquished much of their control and monitoring activities to the operational management team. This is consistent with the theory developed by Jensen and Meckling (1976).

Proposition 4: Few clauses directly penalize incompetent VCs.

Most startup entrepreneurs are in dire need of funding as well as many equally important resources, such as the contacts and the networks available to the VCs. Entrepreneur-VC discussions often focus on the added value the VC can bring to the company in its efforts to secure market share, globalize, etc. However, once the VCs have entered the venture, few contracting clauses penalize the VCs who do not live up to the entrepreneurs' expectations. Arguably the VC will be penalized if the venture fails, but no specific clause actually protects the entrepreneur if he/she is unexpectedly obliged to perform activities that the investors initially agreed to perform.

Proposition 5: Most clauses tend to protect the investors (VCs).

It can be argued that the largest investor in a project is the entrepreneur who puts in his time, energy, commitment, and idea to the benefit of the venture. However, in contracting, the bargaining power seems to lie mostly on the investors' side.

To organize the presentation below, we use an analogy to the actual process used by investors to develop the contractual frame of the investment. First, before making their investment, they will conduct thorough due diligence. Once an investment opportunity has returned a positive due diligence, negotiations start on the formal investment contract. The final contract will include post-investment monitoring and control rights as well as cash flow rights.

The sections are then organized in 4 phases:

- clauses used during the pre-entry or due diligence phase
- clauses used during the investment entry phase
- post-investment monitoring and control clauses - behavior based
- post-investment property / cash-flow clauses - outcome based

The resulting taxonomy is presented in Exhibit 5.

Exhibit 5

Control / Monitoring Rights			Clause Type		Protection for	Clause Objectives				Type of Conflict Mitigation						
						Reduce Information Asymmetry	Reduce Goal Incongruence	Improve VC's Liquidity	Main Objective	Adverse Selection Problem	Moral Hazard Problem	Hold-up Problem	Shirking Problem / Not Exerting Enough Effort	Shirking Problem / Private vs Corporate Interest		
Due Diligence Provisions Non-Disclosure Agreement (NDA) Guarantee Complete Info Letter of Intent (LOI) Ordinary Course DD Expense Paid by Investee Co. Exclusivity Right for VC During Due Diligence					Entrep.	X			Allow protection of info.	X	X					
					VC	X					X					
					VC					Reduce VC costs						
					VC					Avoid Entrep. shopping around for best offer			X			
					VC	X				Protect Investor				X		
					Entrep.	X				Protect Entrep.						
					VC	X	X			Protect Investor				X		
					VC		X			Protect Investor				X		
					VC	X	X			Protect Investor				X	X	
Pre-Investing, Entry Provisions Company Representations (Reps) and Warranties Investor Representations (Reps) and Warranties Affirmative Covenants Negative Covenants Right to Rescind Subscription Agree. Personal Guarantee of Entrep. Confidentiality Clause Patent Rights Key-Man Insurance			X		Entrep./VC				Protects confidentiality							
				X	Entrep.					Protect Investors		X				
				X	VC					Protect VC against death of main employees		X	X			
					both					Reduce risk, improve flexibility		X	X			
					both					Reduce risk, improve networking		X		X		
				X	both	X	X			Reduce agency cost		X	X	X	X	
					both					Improve VC control						
				X	VC	X	X			Improve VC control						
				X	both					Improve VC control						
Post-Investment Control Provisions Statement of Goal and Vision Use of Proceed Definition Board Rights / Control Rights Board Voting Rights Director Indemnity Voting Rights Veto Rights Voting Trust Right Class-Voting Requirements Information Rights Inspection Right			X	X	Directors		X		Improves protection		X					
			X		VC				Improve VC control							
			X		VC				Improve VC control				X			
			X		VC				Improve VC control				X	X		
			X		VC				Improve VC control				X	X		
			X		VC				Improve VC control				X	X		
			X		VC	X			Ensures proper reporting				X		X	
			X		VC	X			Reduce information asymmetry				X			

Exhibit 5 (continued) Taxonomy of Contractual Clauses Part I

Control / Monitoring Rights (continued)	Clause Type		Protection for	Clause Objectives				Type of Conflict Mitigation				
	Behavior Based Clause	Outcome Based Clause		Reduce Information Asymmetry	Reduce Goal Incongruence	Improve VCs Liquidity	Main Objective	Adverse Selection Problem	Moral Hazard Problem	Hold-up Problem	Shirking Problem / Not Exerting Enough Effort	Sharking Problem / Private vs Corporate Interest
Notice of Adverse Change Requirement Financial Reporting Requirements	X		VC	X			Reduce information asymmetry		X			
	X		VC	X			Ensures proper reporting		X		X	X
	X		VC	X			Ensures proper reporting		X		X	X
Auditors	X		Entrep.		X		Motivates management					
Remuneration of Management	X		Entrep.				Protects Entrep from incompetent VC			X		
Minimum Time Assistance by VC	X		VC		X		Protects VC from increased risk / debt		X			
Maximum Debt/Equity Ratio		X	VC				Protects VC from Entrep. tampering with certificates		X			
Shares in Safe Keeping	X		both		X		Protects the company against all its shareholders		X			
Confidentiality Clause	X		both		X		Protects the company from unapproved press coverage		X			
Press Announcement Restrictions	X		both		X		Protects all shareholders from 1 not signing agr.		X	X		
Future Shareholder Agreement	X		VC		X				X	X		
Exclusivity, Non-Compete Clause												
Contract Closing Clauses												
Finder's Fee		X	both		X		Protects shareholders		X			
No Revocation	X		both		X		Protects shareholders		X			
Amendments	X		both		X		Protects shareholders		X			
Remedies / Indemnification	X	X	both		X		Protects shareholders		X			
Notices	X		both		X		Protects shareholders		X			
Notification of Change	X		both		X		Protects shareholders		X			
Binding Effect	X		both		X		Protects shareholders		X			
Survival / Binding on Successor	X		both		X		Protects shareholders		X			
Rights Assignment / Assignability	X	X	both		X		Protects shareholders		X			
Separability of Agreements, Severability of	X	X	both		X		Protects shareholders, if one		X			
Jurisdiction / Arbitration Clause	X	X	both		X		Protects shareholders		X			
Governing Law	X	X	both		X		Protects shareholders		X			
Duration or Termination Clause	X		both		X		Protects shareholders		X			

Exhibit 5 (continued)

Taxonomy of Contractual Clauses Part II

Cash-Flow / Property Rights	Clause Type		Protection for	Clause Objectives					Type of Conflict Mitigation				
	Behavior Based Clause	Outcome Based Clause		Reduce Information Asymmetry	Reduce Goal Incongruence	Improve VCs Liquidity	Main Objective	Adverse Selection Problem	1	2	3	4	5
On going Property Provisions													
	<u>Dividends</u>												
	Revenue Participations	X	both		X		VCs get agreed revenues, Entrep. keep equity			X			X
	Yearly Dividend Right	X	both				Assure minimum return						
	Accrued or Cumulative Dividend Right	X	VC				Assure minimum return						
Management Incentives	State Contingent Dividend	X	VC			X	Assure minimum return						
	No Div. Without 75% Approval	X	VC		X		Ensures alignment of Objectives			X			
Options													
	ESOP (Employee Stock Option Plan)	X	both	X	X		Motivates employees					X	
	ISOs (Incentive Stock Options) and NSOs (Non Qualified Incentive Stock Options)	X	both	X	X		Motivates employees					X	
	Mgmt. Vesting Provisions	X	VC		X		Ensures Entrp stays committed	X	X	X	X	X	X
	Performance Options	X	both	X			Ensures mgmt commitment	X	X	X	X	X	X
Next Financing Round Property Provisions	State-Contingency Clauses	X	both		X		Motivates Entrp., Protects VCs	X	X	X	X	X	X
	Take Away Provisions	X	VC		X		Ensures mgmt commitment	X	X	X	X	X	X
	Earn-out Rights	X	both		X		Incentivize Mgmt / Protect VC	X	X	X	X	X	X
Options													
	Put Option/Warrant	X	VC		X	X	Ensures mgmt commitment			X	X	X	X
	Call Option/Warrant	X	both				Allows the beneficiary to increase his share of the co.			X			
Next Financing Round Property Provisions													
	Follow-on Investment by VC	X	Entrp.				Forces VC to participate in next round	X					
	Discount Right on Follow-on Round	X	VC				Allows VC discount on next round (highly unusual)						
	Milestones Plan for Follow-on Tranches	X	VC		X		Protects VCs against paying too high valuations			X	X	X	X
	Contingency Clauses	X	both		X		Protect against deviations from plans	X	X	X	X	X	X
Anti-Dilution													
	Preferred Subscription Right / Preemptive Rights / Investment Rights /	X	VC		X		Protect VC against dilution						
	"Pay to play" Provision	X	Co.				Get current investors to reinvest						
	"Price Protection" Provision	X	VC				Protect VC against down-rounds and dilution						
	Anti-dilution Full Ratchets	X	VC				Protect VC against dilution						
Employee Reserve	Weighted Average Anti-dilution Ratchet	X	VC				Protect VC against dilution						
	Employee Reserve	X	Entrp.		X		Incentivises mgmt.						
	Anti-Redemption Right	X	VC		X		Protect VC against dilution, sale of assets, etc.			X			

Exhibit 5 (continued) Taxonomy of Contractual Clauses Part II

Cash-Flow / Property (continued)	Clause Type		Protection for	Clause				Type of Conflict Mitigation				
	Behavior Based Clause	Outcome Based Clause		Reduce Information Asymmetry	Reduce Goal Incongruence	Improve VCs Liquidity	Main Objective	Adverse Selection Problem	Moral Hazard Problem	Hold-up Problem	Not Exerting Enough Effort	Sharking Problem Private vs Corporate Interest
Exit-Liquidity Agreements and Exit Provisions												
		X				X						
		X	VC			X						
		X	both		X		Allows shareholders to reclaim shares of mgmt leaving co.	X		X		
		X	both		X		Allows Inv. to reclaim shares		X	X		
		X	both		X		Allows Inv. to reclaim shares			X		
							Provides an exit for the VCs from non performing investments.					
		X	VC			X		X		X		
		X	Co.		X		Incentivises the Entrep. To reach milestones					
Discretionary Stock Redemption Provisions	X		Entrep.			X				X		
Unlocking Provisions												
Deadlock / Buy-Sell Agreements		X	both			X				X		
Registration Rights												
	X	X	VC			X						
		X	VC			X						
	X	X	VC			X						
		X	VC			X						
Automatic Conversion Right		X	VC			X						
Mandatory Conversion Right		X	Co.							X		
Share Transfer Provisions												
	X	X	both			X						
		X	both									
		X	VC		X							
		X	both		X							
		X	VC									
		X	both		X							
		X	VC		X							
		X	VC		X							
Take-Along Clause/ Drag-Along Rights		X	both		X					X		
Tag-Along Rights / Co-Sale Rights		X	VC		X							
Liquidation Provisions												
		X	VC			X						
		X	VC									
		X	VC									
		X	VC									
		X	VC									
		X	VC									
		X	VC									
		X	VC									
		X	VC									
Right to Force Trade Sale or IPO		X	VC									
Liquidation Preference		X	VC									
Cumulative Preferred Dividend		X	VC									
Minimum Annual Return Clause		X	VC									
		X	VC									

IV.2. Pre-Entry / Due Diligence Provisions

Conducting a due diligence is an expensive process for the venture capitalist, so he/she will normally initiate a contractual relationship with the entrepreneur. The first documents signed usually include: (i) a Non-Disclosure Agreement (NDA); (ii) a Guarantee to Complete Information (GCI); (iii) an Exclusivity Right for VC during the due diligence, also known as a “no-shopping” clause.

(i) Non-Disclosure Agreement (NDA)

The Non-Disclosure Agreement ensures that both parties can exchange information freely about their project. The intention for the entrepreneur is to convince the VC to invest while preserving his business idea, concept, intellectual capital, plans, etc. For the VCs this serves to ensure that his discussions with the entrepreneur will remain confidential. Most VCs refrain from signing NDAs, in particular before receiving business plans, since it could constrain their ability to enter a particular space. Others limit the validity of the NDA signed to one year to avoid unlimited liability. In practice, most entrepreneurs must weigh the possible costs with not getting signed NDAs for their projects and possibly getting an investor interested in his idea. Clearly, the professional code of conduct implicitly abided by VCs precludes divulging confidential information: doing so would seriously damage their ability to conduct business in the future. Reputation is the most effective guarantee in this respect. Entrepreneurs should also understand that VCs do not necessarily make good entrepreneurs and are not in the business of starting businesses on their own. Also, if a business concept is likely to be damaged or copied by simply presenting it, then the concept probably does not constitute a valid opportunity in the first place!

(ii) Guarantee to Complete Information (GCI)

The guarantee to complete information clause ensures the VC access to all information available within the company during the due diligence clause. This clause is often included in the Letter of Intent (LOI) signed by the VCs wishing to perform a due diligence. The LOI also often includes the Exclusivity clause.

(iii) Exclusivity, or No-Shopping, Clause

Lead VCs typically demand exclusivity on the investment opportunity while they do their due diligence. This is done (1) because due diligence is an expensive endeavor and VCs want to guarantee that they have a reasonable chance to complete the transaction; (2) to refrain the entrepreneurs from stirring the interest of other potential investors and potentially starting a bidding war for the deal; (3) to allow the VCs to complete the due diligence process and in parallel start structuring their financing round syndicate with worthy co-investors.

IV.3. Investment Entry Provisions

A) Investment Representations and Warranties

Representations and warranties refer to the statements of facts, opinions, and estimates investors ask companies and management to put into writing as conditions for receiving the funding by the investors. These representations (reps) and warranties usually appear in the financing agreement or in separate

“subscription agreements.” Investment representations help complete a funding quickly and cheaply. Used in connection with a proper exemption from registration under applicable securities laws, these representations also help protect a company and management from serious securities liabilities. Examples of common Reps and warranties are presented in the appendixes. Reps and warranties should be drafted carefully; violations create a default that releases the investors from their obligations and subjects management and the company to liability.

B) Operating Covenants

Operating Covenants refer to agreements between an investor and management that outline undertakings management agrees to perform after the investor provides funding. They are typically preconditions to the making of an investment. Operating covenants can also require management to achieve specified goals or to refrain from engaging in specified activities. Failure to fulfill the obligations of an operating covenant can result in severe penalties for management.

(i) Affirmative Covenants

Affirmative covenants refer to the contractual provisions in a venture funding that the company and its management agree to fulfill after the funding has been completed. Common affirmative covenants have been included in Appendix 6. Affirmative covenants can also relate to specific deal points that are to be performed after the closing of a funding such as management’s undertaking to identify an additional board member or hire a suitable chief financial officer or other designated officer to round out management.

(ii) Negative Covenants

Negative covenants refer to operating covenants that prohibit a company from taking specified actions without the consent of the investor. They are a regular part of venture financings and are designed to protect the investor from future events that may dilute or undermine the value of his investment.

IV.4. Post-Investment Monitoring and Control Provisions - Behavior Based

Immediately after the investment and until the next financing round, the VCs will be most concerned with monitoring their investment and controlling the proper execution of the business plan. Investors have joined the ranks of liability holders in the company and have every interest to seek the success of the venture. VCs spend a majority of their time monitoring their investments (Gorman and Sahlman, 1989). Within the contract negotiated, VCs will have put in place a number of control mechanisms or rights to ensure proper possibility of monitoring of the venture. As outlined by Black and Gilson (1998), VCs will only be willing to cede their control rights when the venture is successful and the entrepreneur has proven his management acumen and when it maximizes the firm’s value.

A) Board Rights

Significant venture investors will require board representation and smaller ones will seek at least observer status on the board. In addition, venture investors will

typically insist that, as a matter of good corporate governance, the majority of the board be composed of experienced directors independent of management and that the audit and compensation committees of the board consist solely of independent directors (Hudec, 2000a).

Venture capital investors on the board want a role, or possibly veto rights, with respect to the approval of annual budgets, management hires and dismissals, and compensation matters, including employee share ownership and incentive stock ownership plans. As well, venture capital investors, in their capacity as shareholders, will want the right to approve changes in capital structure, sales of control, amalgamations and substantial asset sales (Hudec, 2000a). The lead venture capitalist in a round of financing will generally expect a seat on the board of directors. If there are multiple rounds of financing or VCs, there may not be enough board seats, the board might get too large or be dominated by financial investors. In the first round, the founders will most likely be able to retain control of the board. If there is only one VC in a round, it is common for it to request two board seats.

B) Voting Rights

Voting rights force the company to get VCs' approval in order to take certain actions such as dividends, mergers, issuances of stock, and amendments to the company's Articles of Incorporation or bylaws. A venture capitalist's preferred stock usually votes as if it was common stock. The preferred stock usually has a number of votes equal to the number of shares of common stock into which it is convertible, and may have the right to elect a disproportionate percentage of the board of directors, frequently a majority.

Preferred shareholders have some protective provisions that require a majority vote of their class. These provisions usually involve changing the certificate of incorporation in ways that affect the preferred shareholders' rights, privileges and preferences such as liquidation preferences, issuing securities senior or equal to existing preferred stock and changing voting rights.

Founders and investors will usually have a written voting agreement or designate in the certificate of incorporation how many seats common shareholders can elect and how many preferred shareholders can elect. Consequently, control over the board can change as later rounds of financings occur.

C) Veto Rights

In addition to board representation, venture capitalists also usually negotiate for veto powers over certain corporate transactions, including the issuance of senior or parity securities, charter or bylaw amendments that adversely affect their interests, mergers and other business combinations, disposition of corporate assets, changes in management salary or benefits and changes to any employee stock-option program.

D) Voting Trust Rights

Voting Trust Rights transfer control from management to an investor if the company does not meet its goals. It is a technique that enables minority investors to step in and take control if things get out of hand. VCs can exercise their rights

under the voting trust, vote the shares of the company, and elect a new board of directors favorably disposed to them. Voting trusts are increasingly rare: a more traditional way for the VC to regain control in these extreme situations is simply that the entrepreneur, under those circumstances, is usually way off his business plan and needs money; the time will then have arrived to refinance the company at much more attractive conditions for the venture capitalists.

E) Class-Voting Requirements

Some venture capitalists will ask for protective provisions for each series of preferred stock with each series voting separately. In theory, these protect each investor class from possible expropriation by another (later) class of investors, giving them in essence veto power over future decisions. The latter can also reduce management's flexibility by increasing the chances that any one investor can block changes.

F) Financial Reporting Requirements - Information and Monitoring Rights

Shareholders with a significantly large bloc of preferred stock may also be entitled to certain information such as monthly financial statements, audited financial statements, and the annual budget. These information rights are usually part of the Share Purchase Agreement.

G) Access and Visitation Rights

Investors will usually require, at reasonable times and upon reasonable notice, full access to all books and records of the Company. They shall be entitled to review them and copy them at their discretion and shall be entitled to inspect the properties of the Company and consult with the management of the Company, subject to usual confidentiality obligations on the investors.

H) Right to Dismiss

A major criterion for VC funding is the quality of the CEO and the entrepreneurial team (Fried and Hisrich, 1994; Fried, Hisrich and Poloncheck, 1993). So, some VCs will negotiate specifically the right to dismiss management if the company runs astray. Typically, that decision will require Board approval. The right to dismiss will thus be effective only if the VC controls the Board, or can convince a majority of its members.

The perceived importance of the CEO to the success of the venture leads many VCs to focus in the CEO if any dissatisfaction develops. Dismissal of an entrepreneurial team member is more likely to occur in poorly performing companies (Fiet, Busenitz, Moesel and Barney, 1997); it has a negative impact on long-term venture outcomes (Busenitz, Moesel and Fiet, 1997). However, following VCs' replacement of a CEO, perceived venture performance improves (Bruton, Fried and Hisrich, 1998a). Bruton, Fried, and Hisrich (1998a) examined the right of the VC to dismiss key members of the management team. They found that CEOs are usually dismissed over issues of strategy rather than on operational issues. In contrast, European VCs rarely have the contractual right to dismiss the CEO. The renowned Swiss venture capitalists, Peter Friedli, often mentions that

he has never seen a CEO fired too early in any of the 140 ventures on whose Board he has served.⁴

Venture capitalists usually have the right to repurchase shares at book value from managers who have been dismissed or who decide to quit. This right, often structured as a call on the managers' shares, acts as a very strong incentive for the management to behave in accordance with the VCs' interest (Sahlman, 1990)

I) Vesting Provisions

Venture capitalists often ask founders to subject their stock, and all common stock sold, to a vesting schedule, i.e. the stock will be repurchased by the company if the employee quits within a certain timeframe. Vesting usually occurs over four or five years, with the first group of shares vesting after a full year (known as the "Cliff") and then a fraction vesting each month (or year) afterwards.

If the company does not adopt a vesting schedule until after the venture financing, the founders may want to start the vesting period at an earlier date, like the day the founders first acquired their stock or joined the company. Sometimes investors negotiate to make the shares of the founders and management subject to future vesting so that they will forfeit shares if they leave the employment of the company before the vesting periods expire.

J) Non-Compete Clause

Founders and management are usually required to enter into agreements with the company that require their full time attention to the company's business, protect its trade secrets and prevent the founders and managers from going into competition with the company. The purpose of this clause is clearly to reduce any goal incongruence. The Non-Compete usually prohibits entrepreneurs from working for another firm in the same industry for some period of time after departure. These clauses are usually written into the work contracts of the employees and the company (Kaplan and Strömberg, 2000).

Non-compete and vesting provisions are aimed at mitigating the potential hold-up problem between the entrepreneur and the investor. The vesting provisions are more common in early stage financings where it is more likely that the hold-up problem is more severe (Kaplan and Strömberg, 2000).

K) Key-Man Insurance

Where the success of the company hinges on the knowledge and skill of specific key individuals, the venture capitalist will insist on life insurance for those individuals (Reinke, 2000). Venture capitalists will be the beneficial owners of these life insurances. These will serve to protect their investment in the company they are funding.

⁴ Peter Friedli remarks during the Venture Capital Conference in Munich in February 2001.

IV.5. Property / Cash-Flow Rights - Outcome Based

The first theories of modern property rights come from the Coase (1937) theorem. It explains that, provided property rights are allocated, the potential parties to a bargain will draw up an agreement, which exhausts their potential mutual gains, and hence an efficient outcome is guaranteed. This theorem has not received unambiguous support (Anderlini and Felli, 1998).

Consider the three standard outcomes in venture capital investments: (i) a follow-on round; (ii) a liquidation; or (iii) an investment exit. Each and every one of those outcomes is addressed in the property rights sections of contracts. In addition, on-going property provisions can also modify the shareholdings and project returns during the life of an investment without any of the three above-stated outcomes happening.

A property right represents the fraction of a portfolio company's equity value that different investors and management have a claim to. Measuring cash flow rights is not trivial, however, because many of the cash flow rights accorded to founders and management are contingent either on subsequent performance (through performance vesting) or on remaining with the company (through time vesting). For Kaplan and Strömberg (2000), cash flow rights, voting rights, control rights, and future financings are frequently contingent on observable measures of financial and non-financial performance.

A) On-going Property Provisions

On-going property provisions change the shareholding during the life of the investment as the project matures and milestones are reached or not. Often VC build in their project penalty/incentive clauses to reward/punish managers/entrepreneurs who succeed/fail to achieve the targets set out in their business plan.

(i) Revenue Participation

Revenue participation gives an investor the right to receive a percentage of the company sales or revenues. Revenue participation works like royalties. The company pays the investor an agreed-upon percentage of sales and deducts the payments as a business expense. The investor shows the payment as ordinary income. Unlike royalties, however, revenue participation usually grants a percentage of all sales instead of just those on a particular product.

Sharing a percentage of revenue with an investor can accomplish some interesting results. First, the investor may become less concerned with the company maximizing earnings (profits) because he is paid based on sales. Second, management's attention may be focused on maximizing profits by minimizing expenses, so that its projected profit margin can be realized after the participation payment is made. Third, the investor may be less concerned with controlling or participating in company affairs. He/she may not even require a seat on the board or audited financial statements, at least as long as payments are forthcoming and things are running smoothly. Fourth, the entrepreneur gives up no equity.

Revenue participation is not common, but they do have their advocates among investors. One of the reasons for using the revenue participation certificate is that matters of management perks are then of no concern. The entrepreneur is free to live well “on the company” and spend at will without fear of shareholder criticism. Investors will remain passive as long as every week, month, or quarter they receive the agreed-upon share of revenues.

(ii) Dividends Provisions / Preferences

Preferred stock may have a dividend payment set at some rate if the directors declare a dividend. Since start-ups rarely declare dividends, this provision is used mostly to boost the argument that preferred stock is more valuable than common stock for tax purposes and to allow the founders to purchase common stock at a lower price.

There are three major types of dividend preferences. First, “*when and if declared*” on a non-cumulative basis but before any dividends are paid to the common stock shareholders (companies always prefer the first type of dividend). Second, “*mandatory cumulative preferred dividends*” which accrue whether or not the company has declared a dividend or has the money to pay such dividends. Lastly, “*state-contingent dividends*” must be paid on a certain date if no exit for the investors has been found by then. Dividend provisions are not common.

(iii) Options

Options are securities that entitle but do not obligate their holders to purchase (call) / sell (put) securities in the future for a predetermined price or a price determined by a set formula. Because they do not obligate the holder to purchase/sell shares, they cannot be used to ensure future financing for a company. Even so, growing companies frequently use them to attract and retain qualified people, to obtain concessions on loans, and to reward outstanding performance.

Venture capitalists usually support stock option plans for employees as long as the plan is not too generous and is vested over a certain period. Options provide an attractive incentive for employees because they give them the opportunity to share in the value created by a company’s growth. A company will want to reserve a certain percentage of a company’s stock for new and existing employees. As a general rule, 10% to 30% of the stock after venture financing is set aside for options. Setting aside shares will dilute the control of both the investors and founders but will help the company attract the top talent needed to succeed. Options generally take four to five years to vest.

A company’s board of directors is usually responsible for granting the options. Shares that can be purchased through an option are referred to as the option shares. The purchase price for option shares is referred to as the exercise price or strike price. Options with exercise prices higher than the fair market value of the company’s shares are considered to be “out of the money.” Options with exercise prices lower than the fair market value of the company’s shares are considered to be “in the money.” Option grants are usually for a fixed number of shares at a fixed price per share. Often, the option only becomes exercisable in the future or gives access to more shares over time. Exercise, or purchase of the shares, is

effected by paying to the company the purchase price for the shares after the option becomes exercisable.

Venture capitalists sometimes bargain for options when they fund a company. They do so because options enable them to increase the upside potential of their investment without obligating them to purchase additional shares from the company. Options are sometimes used to provide investors with anti-dilution protection: they give investors the right to purchase securities in the future at today's price or another bargain, discount price. Lenders sometimes request options, or warrants, in consideration of making a loan or granting an interest rate or term concession.

(iv) ISOs (Incentive Stock Options) and NSOs (Non-qualified ISO)

Incentive stock options are rights to purchase company securities, usually common stock, which are issued to company employees and others the company wants to hire. They are designed to attract new employees and motivate existing employees. They give employee the right to purchase company shares in the future at present-day prices. If the company is successful, and its stock increases in value, the employee can purchase shares of company stock in the future at a price far below the then fair market value of the shares. By creating this potential windfall, the ISO motivates the employee to work hard to make the company succeed. ISOs are issued under guidelines adopted by the company's board of directors.

(v) Performance Options

Performance options are options to purchase company stock that become exercisable only in the event the option holder, usually an employee, meets a predefined performance objective. Employers, as well as investors, like performance-based incentives when they motivate employees to achieve measurable objectives and assist the company in creating value for its investors. However, performance options are used sparingly in companies that have expectations of going public. This is because of accounting issues that can force a company to record a charge against earnings when a performance option matures and becomes exercisable. If great enough, this reduction in earnings can make a company a less desirable candidate for a public offering. It can also cause a company to violate a financial ratio covenant in its loan agreements.

Current accounting standards can require a company to book a charge against its earnings when the option becomes exercisable (when the performance is achieved) if the fair market value of the option shares is greater than the option's exercise price. Growing companies usually plan for increasing valuations and set exercise prices in their qualified options at or below fair market value at the time of option grant. If the company's value increases as planned, a charge to earnings will occur when the performance is achieved at a later date.

(vi) Call Options

Call options entitle the company to require a shareholder to surrender shares of company stock in return for payment of an agreed-upon sum of money. Calls are usually contingent upon some future event, such as the passage of time or the accomplishment of some goal by the company.

Management might exercise a call and redeem an investor's stock if another investor is willing to pay a higher price for shares than the call price. Even without a ready investor, management might call an investor's stock if it believes the market value of the company's stock had risen to more than the call price. In each case, redeeming stock at a call price that is below market value can increase the value of the remaining shareholders' stock. The cost to the company is the cash required to pay the investor for the shares. In deciding to exercise a call, management must weigh the potential benefit of redeeming shares at below market prices against the company's need for the cash used to exercise the call and its ability to replace that cash when needed.

Calls are usually optional but can, by express agreement, be made mandatory. A mandatory call, however, is nothing more than a contract to redeem stock at a future date. Calls, which become effective after a set period of time are used sometimes to force a convertible preferred stock investor to choose, after the time has elapsed, between converting the preferred stock into common stock or accepting the call payment in redemption of the stock interest. When used in this way, the call mechanism sets a time limit on the preferences granted in the preferred stock.

(vii) Earn-Ups

Earn-ups are arrangements whereby an investor acquires most of a company's capital stock but gives management the opportunity to increase its stock ownership by managing the company successfully. Usually, management operates the company under a contract that allows it to control the operations of the company as long as the company meets specified goals. Earn-ups are less a financing device than they are a technique for attracting good people to manage a company. They are sometimes used in a leveraged buyout by the outside investor to entice existing management to remain with the company. If management can keep the company profitable and meet its goals, it often can earn a substantial equity position in the company. Earn-ups assign little value to management's role in putting together the funding used to purchase the company. Instead, they reward management for making the company succeed after the funding.

(viii) Warrants

Warrants are options with long maturity dates. They are sometimes attached to convertible notes and offered to improve the conditions of a deal for the investor. VCs are often keen on obtaining some form of warrants to improve the possible transaction being negotiated.

B) State-Contingency Rights

Usually VCs place great importance on the company reaching the objectives it sets itself in its business plan. VCs commonly enforce state-contingency rights dependent on the achievement or failure to reach certain predefined milestones set in the business plan by the management. Should the business plan's targets not be reached, the VCs use state-contingency clauses to increase their share of the company, reduce their average cost per share, and increase their control.

According to Kaplan and Strömberg (2000), state-contingencies are mostly used in first VC rounds compared to subsequent rounds. VCs commonly write (and

presumably enforce) contracts in which control rights are contingent on subsequent measures of financial and non-financial performance or output. The contingencies appear to be related to the performance measure that is most important to the investors and the company. Cossin, Leleux, and Saliasi (2002) show that “contingent pre-contracting” for follow-up rounds is theoretically a better proposition than the simple “rights of first refusal” commonly found in many contracts. Examples of contingency clauses are presented in the appendix.

C) Take Away Provisions

Closely related to state-contingency clauses, take away provisions are agreements between an investor and management that entitle the investor to penalize management when the company does not achieve agreed upon results. The penalty is often the reduction in management’s shareholdings or in its ability to operate the company independently. Take away provisions are most prevalent in financings where the company sells a controlling interest to the investors and management contracts with the investor to maintain operating control so long as company results are acceptable. They are also common in earn-ups, leveraged buyouts and other transactions where management’s participation is predicated upon it achieving certain results.

D) Next Financing Round Provisions

(i) Subscription Rights

A subscription right clause stipulates under which conditions a capital increase can be approved by the existing shareholders of a company. A typical subscription right clause will stipulate that a capital increase must be approved by at least a majority of the investors and necessitate a shareholder meeting to have taken place. Subscription rights also typically allow “pro-rata” preferential subscription rights (or “pre-emptive right”) to existing shareholders. Should existing shareholders renounce their subscription rights, the company must first offer these shares to other existing shareholders prior to offering them to a third party.

(ii) Anti-Dilution Provisions

Anti-dilution provisions entitle an investor to obtain additional equity in a company, with or without additional cost--depending on the type of anti-dilution clause, when the share capital of a company is increased. Preferred stock usually receives anti-dilution protection against stock dividends, stock splits, reverse splits, and similar recapitalizations.

Because these provisions can result in protected investors receiving free shares of stock when a future funding is at a lower price, anti-dilution provisions disproportionately reduce the percentage ownership of shareholders who are not protected. These “unprotected” shareholders usually include the company’s founders and management. Anti-dilution protections usually appear as provisions of a financing agreement, in the terms describing the conversion rights of a convertible preferred stock, in a warrant or option, in an investors rights agreement, or finally in a shareholders’ agreement.

Five main forms of Anti-Dilution Provisions are used: (i) Preemptive Rights or Rights of First Refusal; (ii) “Pay to Play” Provisions; (iii) “Price Protection” Provisions; (iv) Full Ratchets; and (v) Weighted Average Anti-Dilution.

(iii) Preemptive or Investment Rights

Preemptive Rights or Investment Rights entitle existing shareholders to subscribe to a portion (equal to its percentage ownership of the company--“pro rata”) of newly issued shares or shares available for sale by the company or another shareholder to maintain his or her level of ownership. This right is a contractual one that expires upon the IPO. It can also be a right attached to preferred stock as set forth in a certificate of incorporation. Under extreme forms of the preemptive right, a company must first offer all the shares to the current shareholders rather than just pro-rata shares.

Venture capital investors will typically insist on rights of first refusal, including a preemptive right with respect to future issuances and a right of first purchase of the shares of selling shareholders. Venture investors will typically seek protection not only from dilution resulting from capital alterations but also from “economic” dilution such that both their shareholdings and conversion formula will be adjusted if the company issues additional equity in subsequent rounds of financing at less than the price paid by the venture investors. A typical economic anti-dilution clause gives the investors the right to obtain more common stock, without additional aggregate consideration, in the event that the company subsequently issues new common stock or common stock equivalents at a price below the effective “as converted” common stock price paid by the investors based either on a full ratchet or weighted average formula.

(iv) “Pay to Play” Provisions

The “pay to play” provisions require the preferred shareholders to buy their pro rata share in later down-priced rounds of financing in order to get any price and anti-dilution protection. If the preferred stockholders do not purchase their pro rata share, then their shares are converted to another series of preferred stock that has no price protection. This provision is designed to encourage all investors to help the company in difficult times. Such provisions, however, are atypical.

(v) “Price Protection” Provisions

“Price protection” gives the venture capitalist protection against later rounds of financing that issue stock at a lower price than he paid (called “Down Rounds”). The venture capitalist’s valuation is an educated guess and price protection allows the venture capitalist to make an adjustment should later rounds of financing prove the initial valuation incorrect. If the price in later rounds is lower, the venture capitalist receives additional stock to make up for the price difference.

Full Ratchet Anti-Dilution

Ratchets are powerful forms of anti-dilution whereby the investor is given additional shares of stock for free if the company later sells shares at a lower price. The number of free shares the investor receives is enough to make the investor’s average cost per share (counting all of his purchased and free shares) equal to the lower price per share given to the later investor. What makes the

ratchet so powerful is that the first investor is given these extra shares regardless of the number of shares purchased by the later investor.

Ratchets can also be tied to options or warrants. When they are, the investor receives extra shares when he/she exercises the options. When ratchets are tied to conversion prices, as in convertible preferred stock, the extra shares are received at conversion. Other types of anti-dilution provisions employ weighted average or other allocation mechanisms that give the investor fewer shares when the second investor purchases fewer shares. "Full ratchet anti-dilution protection" allows a venture capitalist who has invested in earlier rounds at a higher price than other VC's in later rounds to receive additional stock as if they had bought it at a lower price in the first round. The company issues those additional shares.

Full ratchets are rarely used because they are widely viewed as unfair. Common shareholders suffer most of the dilution and the later investors end up with a smaller percentage of the company than they bargained for. Additionally, a full ratchet occurs regardless of how small the latter issuance is. However, there are some circumstances where a full ratchet is appropriate. If a venture capitalist discovers that the company is overvalued and needs more cash sooner than expected, the company might give a 6- to 12-month ratchet to assure the VC that it does not need to get later rounds of financing at a lower price. Additionally, as insurance against some future event occurring or not, such as getting a patent, ratchet protection might protect the VC if more money needs to be raised.

Weighted Average Anti-Dilution

Weighted average anti-dilution refers to a milder form of anti-dilution protection, which uses a weighted average formula to determine the dilutive effect of a later sale of cheaper securities and grants the investor enough extra shares for free to offset that dilutive effect. The weighted average anti-dilution often uses the following mathematical formula to set the conversion price:

$$\text{New Conversion Price} = (\text{Old Conversion Price}) \times (\text{Number of Outstanding Shares Before Issuance} + (\text{Money Invested in Current Round} / \text{Old Conversion Price})) / (\text{Number of Outstanding Shares Before Issuance} + \text{Shares Issued in Current Round})$$

The result of this calculation gives a new price per share for the protected venture investor that is then divided into the monetary amount invested to determine the total number of shares to be received. The difference between this number and the number of shares the venture investor already owns is the number of new shares the venture becomes entitled to receive for free. This formula adjusts the conversion price based on the relative amount of the company being sold at the lower price. Some variations to the formula exist and the most common variations involve counting options as either issued or un-issued stock. Shares reserved for granted options are often counted as already issued while those for options to be granted are not.

(vi) Employee Reserve

Quite often the company will want to exclude from the above anti-dilution protection a set number of shares to be issued to key employees as incentives. The venture capitalist is usually also highly in favor of this exclusion since the success

of the company often hinges on the dedication of the company's employees. For a first round venture financing, an amount equal to 10% to 20% of the outstanding shares will often be reserved for issuances under incentive stock option plans and other incentive stock issuance plans to the company's employees. These plans normally provide for a monthly vesting schedule over a two to three year period during which time the employee vests the right to purchase and retain shares in the company. The purchase price is usually established at anywhere from 10% to 20% of the preferred stock purchase price.

(vii) Anti-Redemption Rights

These prohibitions usually apply to sales of substantially all the company's shares or assets by the entrepreneurs, increases in the number of authorized number of shares or directors. Venture capitalists are more favorably disposed toward mandatory redemption provisions, but even these are rare in venture capital agreements because the provisions are "not viewed as a realistic alternative" for a company with little or no cash inflow (Halloran, 1998).

E) Exit Rights Agreement / Liquidity Agreements / Exit Provisions

Liquidity agreements or exit provisions allow a stockholder to convert his investment into cash or at minimum makes it easier for investors to get their money back. Liquidity agreements are common in venture capital financings, particularly when the VCs are uncertain whether the company will ever be able to offer its stock for sale in the public markets. Since many venture capital investments end up being less successful than the business plan predicted, these options can be very important to investors. The parties to investment agreements can consider a number of contractual devices designed to influence the venture capitalists' exit from the arrangement. These include:

- (i) Exit control covenants, obliging management to use reasonable endeavors to facilitate exit before a certain date,
- (ii) Demand registration rights that enable an investor to force a company to register his shares for sale to the public,
- (iii) Liquidation provisions,
- (iv) Put options, requiring management or the investee company to buy the venture capitalist's shares if no exit is achieved within a defined period (Stroud and Vanhaerents, 2000),
- (v) Buy-sell agreements that enable an investor to force management to either purchase his shares or sell its shares to him,
- (vi) Unlocking provisions,
- (vii) Tag-along / co-sale rights,
- (viii) Take-along rights.

These rights as well as other variants are presented in greater detail below.

Convertible debentures also increase investor liquidity and provide an escape when a company is not living up to expectations. They do so by giving the investor the option of not converting his debenture into shares of the company's common stock. If the company does not do well enough to give the investor a

“healthy” profit upon the sale of the common stock he could obtain by converting his debenture, the investor can choose to forgo converting and collect instead the interest and principal repayment on his debenture. VC must then ensure that, at the debt’s maturity, the company will have enough cash to refund their investment.

The Exit Rights Agreement, if there is one, typically replaces the Registration Rights Agreement and may replace the Stockholders Agreement. It will contain the registration rights of the investors as well as any redemption or “put” redemption rights as to common stock or warrants and any “co-sale” rights, all of which provide opportunities for the investors to obtain liquidity for, or “exit”, the investment (Cole and Sokol, 1999).

(i) Registration Rights

Venture investors typically negotiate agreements that entitle them to require the company to register their shares for resale to the public. The purpose of the agreements is to provide the investor with a mechanism to sell his shares. In the US, a “Registration Right” allows the holder to force the company to register the holder’s security with the Securities and Exchange Commission (SEC). This allows the investor to sell his shares publicly. When a company goes public, the underwriters will often be unwilling to allow existing shareholders to sell their shares since it could undermine the new issuance of stock. Additionally, SEC rules may limit certain shareholders from selling shares especially if the holder is part of the management, or owns over 5% of a company unless the shares are registered. Investors are likely to request one of three types of registration rights: (i) demand rights; (ii) piggyback rights; or (iii) S-3 rights.

(ii) Demand Rights

Demand rights enable the investor to liquidate his investment by forcing the company to register his/her shares for sale to the public. Because this can increase a company’s cost of raising equity in the future, the number of demand rights granted and the conditions under which they can be exercised are usually heavily negotiated issues. The outcome of those negotiations can seriously affect the value of a funding and the future success of a company. Among the points management frequently seeks to obtain in negotiations over demand rights are:

- *Limitations on the number of demand rights:* The fewer demand rights the better for management. Generally, a company will grant such demand rights only to specific investor groups.
- *Control over when the demand right may be first exercised:* Typically, managements seek to delay demand registration until at least 12 months after the company has conducted a company initiated initial public offering. Alternatively, managements negotiate for a fixed period of time, such as three years, during which the demand right may not be exercised.
- *Minimum requirements to exercise a demand right:* Usually, this translates into a requirement that a fixed minimum number of shares be offered for sale and that the proposed offering be of at least a certain minimum monetary size.

- *Rights to delay or convert a demand registration:* Managements routinely request the right to delay a demand offering for a fixed maximum period of time if the company's directors have commenced preparations for a public offering or believe a delay would benefit an offering because of market or other conditions. They also frequently request the right to convert a demand offering into a company initiated offering to give the company preference and control over the number of shares offered.

(iii) Piggyback Rights / Come Along Rights

Piggyback rights allow an investor to participate in a registration already proposed by the company so as to include his/her shares in a public offering that the company voluntarily conducts for its own benefit. Unlike demand rights, piggyback rights do not entitle investors to require a company to conduct a public offering but, rather, allow them to include shares in a registration that is initiated by the company. Piggyback rights usually appear as provisions in a financing agreement, an investor rights agreement or a registration rights agreement. Piggyback rights are common in venture financings. Except for certain fees required by various state securities law administrators to be shared by all selling shareholders, companies usually bear the cost of investors exercising piggyback rights.

(iv) S-3 Rights

In the US, S-3 rights are a variation of demand rights. It will force a company to register the holder's stock on an S-3 form with the SEC. Companies with a "public float" over \$75 million in securities held by parties other than management and shareholders with over 5% of the stock and which have been public for at least a year can use an S-3 form. An S-3 registration allows the company to incorporate by reference other documents it has filed with the SEC, so disclosure is much less burdensome. Usually, venture capitalists get S-3 demand rights that are limited in time but not in the number of shares.

(v) Redemption Rights

Three types of redemption provisions are commonly found: (i) Call Redemption Rights; (ii) Put Redemption Rights; and (iii) Discretionary Stock Redemption Provisions. However, redemption rights can also be structured to include such events as termination of employment, death and invalidity, bankruptcy, or breach of contract. Usually upon one of these events occurring the other parties to the contract enforce the redemption of the defaulting party's shares at a fair market price minus a pre-agreed discount.

Call Redemption Rights

This right grants the company to redeem the preferred stock at a predetermined price at some point in the future if the preferred shareholders do not elect to convert their shares into common stock. Usually this right is only triggered if the company meets certain milestones and can serve as an incentive for the entrepreneurs.

Put Redemption Rights

This right grants the preferred shareholders the right to require the company to purchase their shares at a predetermined price at some point in the future. Usually, this redemption price is the original purchase price plus some cumulative rate of return. From the venture capitalist's perspective, this "put" redemption is an exit provision for companies that are marginally profitable, or worse, among the "living dead" (Reinke, 2000).

Discretionary Stock Redemption Provisions

The entrepreneur's only effective contractual protection against adverse selection is a discretionary stock redemption provision allowing him/her to repurchase the stock sold to venture capitalists at a predetermined price. Suchman (1994) found that discretionary stock redemption provisions were common in weak, pre-programmed, and legalistic contracts, but they are not usually found in close or flexible contracts--the most common modern forms of venture capital agreements. Indeed, discretionary stock redemption provisions are sufficiently rare in modern venture capital contracts that many venture capitalists claim never to have seen them.⁵

Even if a discretionary stock redemption provision were proposed, venture capitalists would be unenthusiastic. Such provisions limit a venture capitalist's ability to decide the form of its investment. Venture capitalists are more favorably disposed toward mandatory redemption provisions, but even these are rare in venture capital agreements because the provisions are "not viewed as a realistic alternative" for a company with little or no cash inflow (Halloran et al., 1998). For example, if a company was contemplating the exercise of a discretionary right of redemption, it is safe to assume that the value of the company had risen and the venture capitalist would convert preferred shares into common shares. Although the venture capitalist would remain interested in the company, many of the control mechanisms previously awarded to the venture capitalist would evaporate upon conversion.⁶

It is misleading to assume that the investor gambles that the company's fortune will not improve, because if the company's fortune does improve, the investor's conversion right appreciates. Consequently, in venture capital deals, the corporation's option to redeem works primarily to force an investor conversion that will relieve the company of the burdens of interest (or dividend) payments and restrictive covenants (Dent, 1992).

The absence of discretionary stock redemption provisions from most modern venture capital contracts suggests that the cost to the entrepreneur of protecting

⁵ Gerard H. Langelier of Olympic Venture Partners observed: "You can divorce your spouse. You cannot divorce your investors." Remarks at the Venture Oregon '97 Conference (Oct. 14, 1997).

⁶ Halloran *et al.* (1998) observed that "corporations prefer redemption provisions exercisable at their option so that they can force the Preferred Stock to convert into Common Stock (and surrender its privileges) at some time in the future, even if the conditions for automatic conversions are not met".

against adverse selection through contract are greater than the risks. This in turn suggests that entrepreneurs have other methods of protecting against adverse selection. The most likely candidate for such protection is the market for reputation, discussed above.

(vi) Automatic Conversion Rights

Preferred stock holders in venture deals usually have the right to convert their preferred stock into common stock at any time. Preferred stock also often automatically converts to common stock upon certain events (usually at a ratio determined by dividing the initial purchase price by the conversion price). Such events include an initial public offering by the company or if a certain percentage of the preferred shares votes to convert. A company should try to get the preferred shares to convert as soon as possible to get rid of their special rights and streamline the balance sheet for the initial public offering. Usually a vote by the majority or a supermajority of preferred shares will force an automatic conversion. An entrepreneur should seek a majority requirement or the smallest supermajority requirement possible.

Automatic conversion at the initial public offering usually requires that (i) the IPO is firmly underwritten, i.e. the underwriters must have committed to placing the entire offering; (ii) the offering must raise a certain amount for the company; and (iii) the offering price must exceed a certain minimum, such as four times the conversion price of the preferred stock.

When the preferred stock converts, the inherent rights associated with it cease to exist. Some contractual rights, such as registration rights that force the company to register a shareholder's stock usually survive. Other rights like information rights (the right to receive certain ongoing company financial information) and pre-emptive rights (the right to buy stock the company issues) usually terminate upon the IPO.

(vii) Mandatory Conversion Clauses

The investor's right to convert his preferred stock into common stock is usually coupled with the company's right to require conversion in the event of an initial public offering or, less frequently, sale of the company. This is the mandatory conversion clause. The conversion price is usually equal to the purchase price of the preferred stock but is subject to downward revision (resulting in giving the investor more common shares upon conversion of the preferred shares) after a subsequent sale of stock by the company at lower prices.

(viii) Unlocking Provisions (incl. Buy-Sell Agreements)

Unlocking provisions enable investors to disengage their financial arrangements with management. A typical unlocking provision is a buy-sell agreement. Another provision creates a mechanism through which either management or the investor can force the other to sell its interest in the company to a third party or buy the stock of the other party. Typically, this arrangement allows either management or the investor to accept a third party's offer to buy the company's assets or the stock of both shareholders in the company. The other party must then either buy the first party's shares at the per-share price contained in the third party offer or sell his interest, along with the interests of the other shareholder, to the third party.

Buy-Sell Agreements

Buy-sell agreements are contracts that entitle one shareholder to force others either to buy his stock or to sell him theirs. These contracts often appear as provisions in a financing or shareholders' agreement. Many investors insist on buy-sell agreements with the entrepreneurs of companies they fund. They view these agreements as a way to help them withdraw from a company that does not live up to their expectations. With a buy-sell, investors know they can either get their money out or get management's shares. With management's shares, they can usually replace management or have enough shares to sell control of the company to others. In these arrangements, two or more shareholders agree that if the company fails to meet certain goals, either may buy all of the other's stock in the company. By the terms of the agreement, whichever shareholder exercises this option must first offer to sell his stock to the other shareholder. The purchase price per share is usually the same for both shareholders (although sometimes the price is slightly lower for management). In this way, either shareholder can force the other out of the company but only by risking being bought out himself.

(ix) Take-Along / Drag-Along Rights

In cases where the investors control a majority of the company on a common stock equivalent basis, it is not uncommon for the purchase agreement to contain "drag- along" rights in favor of the investors. These give the investors the right to require management and other stockholders to sell (to be "dragged along") in the sale of all or substantially all of the company's stock to a third party, providing yet another full exit opportunity to the investors. Note that the drag-along might not be enforced by investors/VCs wishing to force the management to stay and work for the new shareholder. For management to exit, they need a Tag-Along right (discussed later). This is especially useful in cases of trade sales where the buyer might insist on detaining 100% of the company for the trade sale to happen.

(x) Tag-Along Rights / Co-Sale Rights

Tag-along rights are rights that require one or more parties, usually management, to include another party, usually an outside investor, in the opportunities they receive to sell their stock. They are also referred to as co-sale rights. A co-sale right is the right to sell its stock to anyone to whom a founder or another investor of the company proposes to sell its stock.

A co-sale right is designed to keep the founders tied to the company and requires management members to share any future sale of their stock with the present investors. It usually allows an investor to sell its stock at the same time a founder decides to sell and replace some of the shares the founder has offered for sale. It is reasonable for a founder to resist a co-sale right unless a substantial portion of all the founders stock is sold. A founder can also insist on certain exemptions from a co-sale right for personal liquidity reasons such as making a down payment on a house, paying a child's school tuition, sudden death or termination of employment. Founders may ask for a reciprocal right from the venture capitalists but such a reciprocal right is rarely granted.

In practice, whenever a management shareholder is approached and has the opportunity to sell his/her shares of company stock, he/she must notify all investors and tell them the terms that have been proposed. Then the outside

investors have an opportunity to sell some of their shares to the purchaser. If the outside investors elect to include some of their shares in the sale, the management shareholder will reduce the number of his shares being sold so that the purchaser acquires the number of shares he originally offered to buy. The number of shares the outside investors are entitled to include is usually a predetermined percentage of the total number of shares being sold. Often, that percentage reflects the relative number of shares held by the investors (“pro-rata”) and the selling management shareholder.

(xi) Liquidation Provisions

Liquidation provisions regulate the settlement of the proceeds accruing to the party upon a liquidation or bankruptcy.

Liquidation Preference

A liquidation preference entitles the preferred stock shareholders to receive their original investment back and usually any declared or mandatory but unpaid dividends before the common stock shareholders receive any proceeds upon liquidation of the company. This provision is a downside protective measure for the venture capitalist. In reality, however, rarely is a company liquidated unless its debts to creditors exceed its assets. In this case, there is usually no money for any of the shareholders, preferred or common. Liquidation, however, is often defined to include mergers and reorganizations. In this situation, a merger “liquidation” would permit the preferred shareholders the right to receive their original investment back if they elected not to participate in the merger. Again, this provision is rarely exercised since the preferred shareholders often have the voting power granted to them to preclude any merger or reorganization that they do not approve (Reinke, 2000).

If the company issues multiple rounds of preferred stock, then it needs to decide whether the earlier series of preferred stock get a liquidation preference over the others or whether they are treated equally or *pari passu*. A liquidation preference will usually add accrued and unpaid dividends though very few start-ups pay dividends. However, some arrangements will have a “cumulative dividend” that is a mandatory annual dividend designed to build up value of the liquidation preference over time. Other arrangements will mandate that the liquidation preference increase by some rate every year.

Cumulative Preferred Dividend

One common way of making the liquidation rights stronger is by giving the investor cumulative preferred dividends. Even though these are dividends, and strictly speaking do not have to be paid out, they will accumulate and be added to the liquidation claim.

Minimum Guaranteed Annual Return Clause

On some occasions, usually when a trade sale is expected, the VCs will negotiate a minimum guaranteed return clause on their investment. This clause allows the investors to have utmost equity seniority at the time of exit. In the event of a trade sale, this clause is extremely powerful for the investor as it ensures him a minimum guaranteed annual return.

IV.6. Conclusion

As VCs tend to try to use the same contracts over and over again out of legal cost optimization and time efficiency concerns, contracts tend to be relatively similar across the industry and are often referred to as “boilerplate” or “plain vanilla”. VCs will add new clauses to their standard contracts as they encounter them in their co-investments. This implies a certain peer-to-peer learning process. Finally, clauses are adopted more firmly as retrospective analysis shows their effectiveness.

As evidenced in this section and further confirmed by Langström, Manigart, Mason, and Sapienza (2000), the higher the probability of opportunistic behavior the more probability that additional clauses are included in the contract. Further, as the success materialize and the valuations increase, companies get financed by increasingly sophisticated investors who invest larger amounts of money and need to spend the time and legal costs necessary to maximize their return while minimizing their risks.

A number of studies have been done on the potential effect of combining clauses in contracts and their potential effect in a venture. However much remains to be analyzed on this topic. Furthermore, the use of multiple layers of contractual clauses in venture capital rounds of financing must also be examined as a crucial tool to maximize return for investors and minimize risks.

V. CONCLUSIONS

Most contractual clauses are included in order to avoid principal-agency problems, by either (1) enhancing goal congruence between entrepreneurs and investors; (2) reducing information asymmetry between entrepreneurs and investors; (3) reducing the opportunity for opportunistic behaviors. The main purpose of the written contract is thus to reduce possible agency problems at the outset, rather than to build trust between both parties. It is striking that most clauses protect investors against adverse actions of entrepreneurs, rather than vice versa. Although the former are possibly more important than the latter, investors may also take detrimental actions towards the venture or the entrepreneur, e.g. by not giving further financing when needed, or by not giving as much assistance as needed or expected by the venture. Clauses regulating these possible problems are seldom included in the contracts at this point.

Further studies could clearly concentrate more on the financial affect and mathematical modelization of venture capital clauses. A step in that direction is the real options modeling of venture capital contractual features in Cossin, Leleux and Saliassi (2002), which includes a first analysis of the interactions between clauses and their valuation effects. These results would have to be confronted to empirical evidence and progressively built into the industry common practices.

Another interesting angle of analysis is that provided by Kaplan, Martel and Stromberg (2002). The authors postulate that the long-standing performance differential between US and other international venture capitalists (an astounding 10% per annum on average for early-stage investments over the last 20 years, with US venture capitalists performing much better than their European counterparts) could be linked to weaker VC investment contracts. The authors find that (1)

venture capitalists investing in non-US deals have significantly weaker liquidation and exit rights, which lowers their ability to recover the investment in companies that perform below expectations. In addition, due to a much lower use of vesting provisions and anti-dilution rights, entrepreneurs on average receive less high-powered cash flow incentives compared to their US counterparts. (2) These differences seem to be somewhat related to the institutional environment. In particular, VC investments in common law countries (Anglo-Saxon inspired legal systems) exhibit contractual features less different from US VC contracts. (3) Although contractual differences correlate with the institutional environment, they cannot fully explain these differences, since there are VC funds that are able to implement US contractual features in any institutional environment. More sophisticated VCs (larger, investing internationally, and/or having co-invested with US venture capital funds in the past) are more likely to write contracts similar to those of US VC funds. Moreover, VC funds are more likely to write US-style contracts when the amount of funds committed in the deal is large. Taken together, these results suggest that the limited accumulated experience in venture capital markets outside of the US, together with fixed costs of learning, are important for explaining the differences between international and US contracts.

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